

Applicant's amendment

Listing of Claims

1. (Allowed) In combination:  
a central maintenance computer system; and,  
an onboard maintenance terminal;  
said onboard maintenance terminal linking faults to maintenance documentation;  
said onboard maintenance terminal further linking flight deck effect (FDE) engine indication crew alerting system, (EICAS) messages to the aircraft fault isolation manual, (FIM) troubleshooting procedures; and,  
said onboard maintenance terminal further functioning to provide air/ground simulation capabilities; and air data computer (ADC) simulation capabilities.
2. (Previously Amended) The method of operating an onboard maintenance terminal for an aircraft comprising the steps of:  
selecting a real time highlighted central maintenance computer (CMC) fault or flight deck effect (FDE) being displayed on the (CMC) maintenance terminal menus; and,  
obtaining a display of the aircraft fault isolation manual (FIM) troubleshooting procedure for the (CMC) fault or flight deck effect (FDE) indication.
3. (Previously Added) A method for providing airline mechanics with an electronic maintenance terminal (MT) for displaying real time central maintenance computer (CMC) data screens including the steps of:  
providing said airline mechanics with access to fault isolation manual (FIM) troubleshooting procedures via an internal software hot link between the (CMC) fault code and the (FIM) procedure wherein (FIM) data is a subset of an electronic portable maintenance aid (PMA) data; and

further linking a flight deck effect (FDE) engine indication crew alerting system (EICAS) messages to (FIM) troubleshooting procedures.

4. (Withdrawn)
5. (Currently Amended) An electronic maintenance terminal (MT) display for displaying real time central maintenance computer (CMC) data screens and providing a mechanic with access to aircraft maintenance manual fault isolation manual (FIM) troubleshooting procedure via an internal software hot link between CMC fault code and FIM troubleshooting procedure; and,  
said FIM includes data which is a subset of portable maintenance aid (PMA) data.
6. (Previously Added) An integrated onboard maintenance documentation system including the steps of:
  - providing a cursor control device on an aircraft mounted maintenance terminal (MT);
  - selecting a real time highlighted central maintenance computer (CMC) fault or flight deck effect (FDE) displayed on the (MT) and obtaining an immediate display of the aircraft maintenance manual fault isolation manual (FIM) troubleshooting procedure for the fault or flight deck effect (FDE) indication.
7. (Previously Added) The method of claim 6 including the step of:
  - sending the troubleshooting procedure to an onboard printer or accessing additional maintenance information and procedures from portable maintenance aid (PMA) data links within the PMA data.
8. (Currently Amended) An aircraft having an onboard diagnostics system, comprising:
  - a central maintenance computer system for collecting fault information about the aircraft;
  - a fixed display terminal on which the fault information is displayed in real time;
  - a cursor device for selecting a single fault information item; and,

a computer file of a troubleshooting procedure that corresponds to the fault information item that is displayed on the fixed display terminal in a readable format upon selection of the fault information item by the cursor device; and,

said central maintenance computer system providing access to central maintenance computer functions via ARINC 429 buses and including air/ground simulation capabilities; air data computer simulation capabilities; and, linkage of central maintenance computer faults and flight deck effect messages to a portable maintenance aid.

9. (Currently Amended) In combination:

an aircraft mounted maintenance terminal (MT);

said (MT) emulating a multi-purpose control display unit (MCDU);

a central maintenance computer (CMC);

a (CMC) screen display on said (MT); and

means for clicking a highlighted (CMC) fault message number on said (CMC) screen thereby providing immediate access to troubleshooting procedure via a real time link.

10. (Previously Added) An aircraft mounted maintenance terminal (MT) comprising in combination:

a display;

a cursor control device;

a keyboard;

an internal hard drive;

a floppy diskette drive;

a CD-ROM drive;

interfaces with ARINC 429 buses;

interfaces for brightness and contrast control; and,

a graphical output printer bus.